

95. *Panch Maháls*.—There is a marked improvement in this division, as the area traversed by fire is considerably less than in the previous year, the figures being 3,944 acres as against 10,133 in the year 1891-92. The Divisional Forest Officer, however, reports that several of the fires of the year "have the character of being exceptionally large." This will be remedied when the object for which the reporting of forest fires to the Collector directly on their occurrence is better understood by the Revenue subordinates and the people at large.

96. The expenditure incurred, during the year of this report, on burning fire lines, rewards to villagers on rendering prompt assistance in putting out fires, &c., is compared with that of the preceding year in the following statement:—

No.	Division.	Expenditure.		REMARKS.
		1891-92.	1892-93.	
1	East Thána ...	701	1,576	
2	West Thána ...	2,364	2,029	
3	Surat ...	43	186	
4	Panch Maháls ...	2	...	
	Total ...	3,110	3,791	

(b) (3). *Regulation of Grazing and Protection from Cattle.*

97. The revised rules for the regulation of grazing published under Government Resolution No. 3595, dated 23rd May 1890, are at present applied to the Bassein, Kalyán and Bhiwandi ranges in the Thána District and to all the forest areas in Surat except the Dángs. The introduction of these rules in the Panch Maháls Division was under contemplation, and it is hoped that they will soon be generally applied. On the working of the rules wherever they have been introduced, no complaint has been received during the year; but there is reason to fear that very many cattle enjoyed free grazing for which fees really ought to have been paid. This fault will gradually disappear and will give no trouble in the future, as there is a tendency not to put too liberal an interpretation on the rules.

98. In the two Thána divisions only 104 out of 1,264 square miles are at present closed to grazing, but as the coupes of each year up to a limit of ten years are exploited, the proportion will increase.

99. The extent of closures in Surat is limited to only 28 square miles out of a total of 746½. But exclusive of the Dángs the percentage of closed area is higher than anywhere else in this Circle, being 41. It is important to remember, however, that only in this division a close season from 16th March to 31st August for grazing has been observed for the last two years, and the people are commencing to learn to make provision of fodder to feed their cattle on during the time grazing is forbidden in the forests.

100. A third of the area under the management of the Forest Department is closed to grazing in the Panch Maháls, but owing to the inefficiency of the protective staff the closures are not respected, and a great deal of illicit grazing is prevalent in this district than anywhere else in the Northern Circle.

101. The number of animals impounded during 1891-92 and 1892-93 for trespassing in open and closed forests is compared in the following table:—

No.	Division.	From open Forests.		From closed Forests.		Total.	
		1891-92.	1892-93.	1891-92.	1892-93.	1891-92.	1892-93.
1	East Thána ...	18	421	680	1,260	698	1,681
2	West Thána ...	286	67	1,553	1,598	1,839	1,665
3	Surat ...	23	314	379	927	402	1,241
4	Panch Maháls...	1,595	1,464	122	226	1,717	1,690
	Total ...	1,922	2,266	2,734	4,011	4,656	6,277

102. Notwithstanding the above return is for 15 months, and not for 12, the impoundings have been heavier in the East Thána and Surat divisions than in the previous year. The reason for the increase in the former is probably the larger number of cattle-pounds erected for facilitating the impounding of cattle, which in former years could only be driven out of the forests, because the distance of the nearest pound from the scene of offence was too far to make it practicable to drive the cattle there.

103. A considerable number of the animals impounded in Surat were for evading payments of the prescribed fees. This step was only taken after repeated warnings had been given to the owners. On this subject while commenting on the Divisional Report the Collector of Surat remarks as follows :—

“The number of cattle impounded has gone up from 204 to 1,241, but it is submitted that the latter number is by no means excessive for 68 square miles of forest during a whole year. The grazing fees in Mándvi though very equitable are naturally not popular, and it is quite impossible to introduce them effectively among a people as unused to restrictions as Gypsies without some slight punitive measures; the method of impounding is the most lenient way possible of teaching them that those who graze must pay.”

104. The number of cattle actually impounded during the year in the several divisions of this Circle, however, by no means represents the number of cattle that are found grazing where they have no right to graze. In the first place, many are sure to escape when a large number are caught, as it is impossible for one or two guards to drive all of them. In the second place, owners often attempt to rescue the animals on their way to the pound when they find it can be done successfully and the law cannot be always brought to bear upon them. To lax supervision also, it must be admitted, on the part of guards much illicit grazing prevails in closures.

105. The sites of the pounds erected during the year by the Forest Department in the two Thána divisions under the orders of the Collector have been carefully selected with regard to the positions of the forests and of formerly existing pounds. The object aimed at is to have a pound within a reasonable distance of the forests in which cattle trespass is to be apprehended.

#### *Fencing.*

106. In the East Thána Division no new fences were erected, attention having been paid only to keep the old ones under repairs.

107. Operations on a larger scale than formerly were projected in the West Thána Division to fence in the lower boundaries of exploited coupes in which cattle trespass was to be apprehended, but unfortunately the supply of wire failed, and the work was left half finished.

108. In Surat the area worked out during the year in the Párner Reserve (9 acres) was fenced in with wire.

109. No kind of fencing was attempted in the Pañch Mahals Division.

#### *Civil Suits.*

110. Two civil suits left over from the preceding year were disposed of during 1892-93. These were as follows :—

Gangádhār Vishvánáth Kondkar brought a suit against the Forest Department, claiming damages to the extent of Rs. 2,719 for alleged wrongful suspension of his contract for the Rajawli coupe in the West Thána Division. The suit was decided against Government, and a decree for the sum of Rs. 1,229-8-0 was passed in favour of the plaintiff for damages and costs.

111. The suit filed against the Izafatdárs of A'mgaon, taluka Váda, in 1890-91 to recover quit-rent and nazrána on account of timber and other forest produce cut and removed by them from the forest of the village, was determined in favour of Government, and the amount of cess to be paid was fixed.

112. Mr. V. D. P. Rebeiro, Extra Assistant Conservator of Forests, was sued in the Subordinate Judge's Court at Thána by one Shivaram Dipchand, one of the defendants in the criminal prosecutions instituted by Government against Dádu Súkar, contractor of the Shirgaon coupe, and others in 1891-92 claiming Rs. 1,055-5-6 as damages on account of alleged false complaint and his unlawful

detention in custody for some 19 days. The case was decided against the plaintiff, who had to pay costs of the suit.

### *Criminal Cases.*

113. Criminal proceedings were instituted against one of the Dépôt officers serving in the Dánga, Gulábchand Prággi, for having levied excess fees upon produce removed, and thereafter under fear of detection for having burnt some portion of his records. The Political Agent, Khándesh, before whom he was arraigned, sentenced him to one year's rigorous imprisonment.

### *(c). IMPROVEMENT OF FOREST GROWTH.*

#### *(1). Natural Reproduction.*

114. In the Thána forests natural reproduction was vigorous during the year and would be perfect if fires and cattle trespass could be wholly checked. The coppice in most of the exploited coupes grows fast, though the teak excels other species in this respect during the first years of its re-growth. The shoots also suffer to a certain extent, when they first commence to appear, from the browsing of wild animals such as *Portax pictus*, *Tetroceros gudricornis* and *Cervulus arcus*; the neighbourhood of a recently felled coupe being almost a certain find for one or other of these animals. In a good many of the compartments exploited in the earlier years of the Working Plan rotation, i.e. in 1887-88, a dense crop of promising mixed forests is now to be seen, and the progress made by each year of successful closure in dominating the grass, reeds and other noxious growth has secured the compartments from all possible danger from fires. So long as there is a sufficient area open to grazing for the wants of the people, it is not advisable to shorten the limit of closure of ten years fixed in the Working Plan, for the longer the young stock is left undisturbed the better it will grow.

115. The fires of the year having not proved disastrous, except in the forests on the Tánka Lake catchment area, and the rainfall having been ample though late, a plentiful crop of seedlings, it is very natural to expect, should have established themselves, as it is invariably found that they do so when the above circumstances are present.

116. The plague of caterpillars noted by Mr. Shuttleworth as having probably interfered with the flowering and seeding of the teak, by eating all their leaves and checking the growth of trees, was fortunately absent during the year.

117. It is worthy of notice that the *Inga dulcis*, which was experimentally cultivated on the Thána-Panvel road, has now become firmly established and reproduces itself naturally. Several self-sown seedlings are now found in the vicinity of the parent trees on the borders of the adjoining forests.

118. In the Surat Division natural reproduction is somewhat retarded by fires, and as a whole is not very satisfactory. Bulsár and Chikhli ranges are, however, exceptions to the general rule, and are a splendid example of what Nature can do in this respect. The remarks of Mr. Lely, the Collector, on this subject are worth quoting:—

"Some of the forests in the south of the district though small are pictures. In Mándvi Táluka the soil is inferior, but the Department is there reclothing large tracts of land and vindicating itself as one of the most useful agencies of the country."

119. Natural reproduction in the Panch Maháls Division is to be found in small patches few and far between, but wherever it presents itself it is good. Owing to the state of the forests being generally far from fully stocked, it only asserts itself very slowly; and, until the people learn to respect the closures better than they do at present, prospects of clothing denuded areas solely by natural means are very remote.

#### *(2). Artificial Reproduction.*

120. Cultural operations in this Circle are, as a rule, confined to the exploited compartments and other closures in order to assist natural reproduction. Regular plantations properly so called, being very small in extent, appear to have